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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,950	11/25/2003	Russell Alan Parker	10030712-1	9616

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AGILENT TECHNOLOGIES, INC.
INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT.
P.O. BOX 7599
M/S DL429
LOVELAND, CO 80537-0599

EXAMINER

LUM, LEON YUN BON

ART UNIT

PAPER NUMBER

1641

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,950

Applicant(s)

PARKER ET AL.

Examiner

Leon Y Lum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-39 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-33, drawn to a method for treating at least one member of a backing element/microarray assembly structure, classified in class 427, subclass 452.
 - II. Claims 34 and 38, drawn to a system, classified in class 422, subclass 68.1.
 - III. Claims 34 and 39, drawn to a kit, classified in class 422, subclass 61.
 - IV. Claim 35-37, drawn to a method of detecting the presence of an analyte, classified in class 435, subclass 7.1.
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by the

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materially different process of photolithographically depositing component using a photomasking device.

This relationship also applies to Groups I and IV.

4. Inventions I and III are unrelated, independent, and distinct inventions.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operations, different functions, and different effects. Group I is a method with the effect of treating at least one member of a backing element/microarray assembly structure, which is a different effect from Group II, which is the effect of detecting the presence of an analyte in a sample. Group I also includes the step of depositing a component on said at least one member, which is a step that Group II lacks. Group II includes the method of detecting the presence of binding complexes on the surface of said microarray assembly, which is a step that Group I lacks.

Therefore, Groups I and III have different modes of operations, different functions, and different effects that distinguishes them as unrelated, independent, and distinct inventions.

5. Inventions II and III are unrelated, independent, and distinct inventions.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use

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together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operations. Group II is a system that includes a sample, which is a limitation missing from Group III. Group III is a kit that includes instructions for using said treated member in an assay array, which is a limitation missing from Group II.

Therefore, Groups II and III have different modes of operations that distinguishes them as unrelated, independent, and distinct inventions.

6. Inventions II and IV are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice the materially different process of preserving analytes in a liquid sample by containing it in the backing element/microarray assembly, wherein the treatment prevents the analytes from adhering to the surface.

This relationship also applies to Groups III and IV.

7. In the even that Applicants elect Group I, an election for each of the following species must also be made:

a. One organic solvent:

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- i. Polar organic solvent, claims 12-13
- ii. Non-polar organic solvent, claims 14-15

b. One type of surface modification to at least one member of a backing element/microarray assembly structure:

- i. Contacting with plasma, claims 17-18
- ii. Contacting with gas/air mixture, claim 19
- iii. Contacting with a plurality of beads, claim 20
- iv. Contacting with at least one form of radiant energy, claim 21
- v. Exposing to UV/O₂, claim 22
- vi. Bombarding with electrons, claim 23
- vii. Contacting with at least one reactive gas, claim 24

c. One type of substrate:

- i. Backing element, claim 31
- ii. Microarray, claim 32

8. Currently, claims 1-11, 16, 25-30, and 33 are generic. Claims 12-15, 17-24, and 31-32 are subject to species election.

For example, if Applicant elects Group I and species a(i), b(v), and c(ii), claims 1-13, 16, 22, 25-30, and 32-33 consist of the elected claims.

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9. Because these inventions are distinct for the reasons given above and the search required for each of Groups I-IV is not required for the other Groups, restriction for examination purposes as indicated is proper.

10. A telephone call was made to Diane Rees on 24 August 2004 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

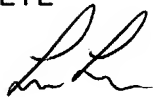
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon Y Lum whose telephone number is (571) 272-2878. The examiner can normally be reached on 8:00am-5:00pm.

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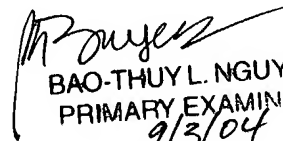
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LYL



Leon Y Lum
Patent Examiner
AU 1641
(571) 272-2878



BAO-THUY L. NGUYEN
PRIMARY EXAMINER
9/3/04